

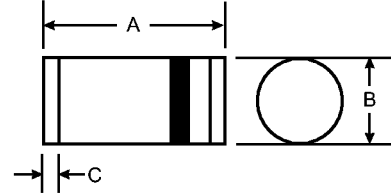


1N5817M / 1N5818M / 1N5819M

1.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

- High Current Capability
- Low Forward Voltage Drop
- Guard Ring for Transient Protection
- Glass Package for High Reliability
- Packaged for Surface Mount Applications



Mechanical Data

- Case: MELF, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode band
- Approx Weight: 0.25 gram
- Mounting Position: Any

MELF		
Dim	Min	Max
A	4.80	5.20
B	2.40	2.60
C	0.55 Nominal	
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	1N5817M	1N5818M	1N5819M	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Maximum Average Forward Rectified Current @ $T_T = 90^\circ\text{C}$ (Note 1)	I_O	1.0			A
Maximum Forward Surge Current, Half Cycle @ 60Hz Superimposed on rated load, JEDEC Method	I_{FSM}	25			A
Maximum Forward Voltage Drop @ $I_F = 1.0\text{A}$ @ $I_F = 3.0\text{A}$	V_F	0.450 0.750	0.550 0.875	0.600 0.900	V
Maximum Reverse Leakage Current @ V_{RRM} @ $T_A = 25^\circ\text{C}$ @ $T_A = 100^\circ\text{C}$	I_R	1.0 10			mA
Typical Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	130			K/W
Typical Junction Capacitance (Note 2)	C_j	110			pF
Storage and Operating Temperature Range	T_j, T_{STG}	-60 to +125			$^\circ\text{C}$

- Notes:
1. Valid provided that terminals are kept at ambient temperature.
 2. Measured at $V_R = 4.0\text{V}$, $f = 1.0\text{MHz}$.

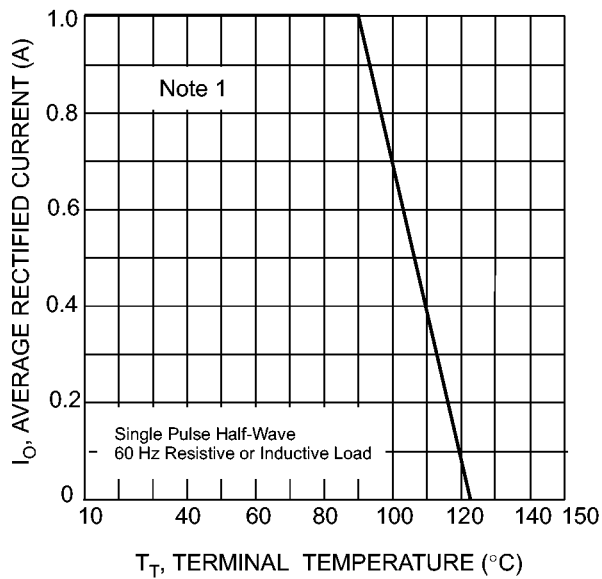


Fig. 1, Forward Current Derating Curve

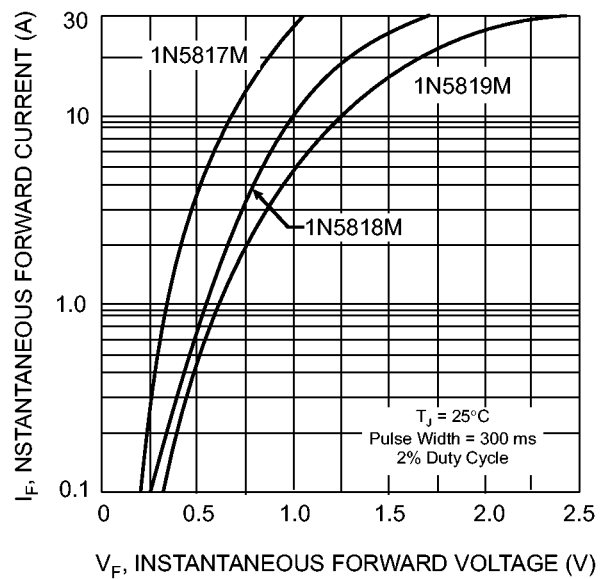


Fig. 2, Typical Forward Characteristics

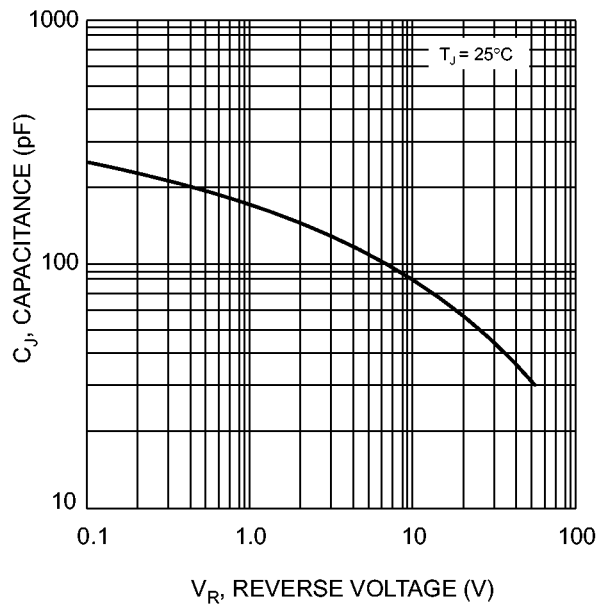


Fig. 3, Typical Junction Capacitance

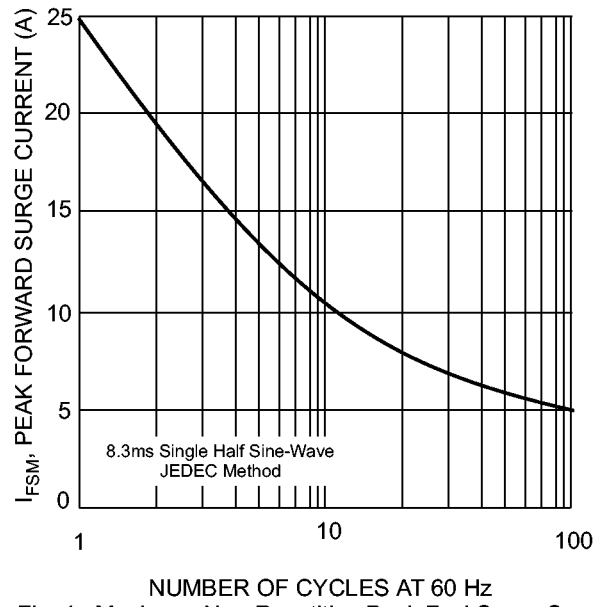


Fig. 4, Maximum Non-Repetitive Peak Fwd Surge Current